VOLUME XX NUMBER 4

BULLETIN

OF THE

AMERICAN ASSOCIATION

OF

UNIVERSITY PROFESSORS

CARNEGIE FOUNDATION REPORT

COMMITTEE ON CHAPTERS

EDUCATIONAL DISCUSSION

NOTES FROM PERIODICALS

APRIL, 1934

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VOLUME XX APRIL, 1934 NUMBER 4

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EDITOR: H. W. TYLER

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EDITORIAL NOTE

The attention of Active members is particularly called to the announcement on page 263 of A Plan for Encouraging Chapter Activity. The size of the Association and the wide geographical distribution of its members make it extremely difficult to centralize correspondence and exchange of ideas in a single office. In line with the proposals of the Committee on Chapters at the last annual meeting, a plan has been worked out under which each member of the Committee on Chapters takes a measure of responsibility for keeping contact with chapters in a group of neighboring states, with a view to the arrangement of visits or regional meetings so far as such activities may be adapted to local conditions. The April Chapter Letter contains necessary information as to geographical distribution which may be published later, in more definitive form.

The Chapter Letter also invites advice from chapters in regard to the place and date preferred for the next annual meeting, and proposals for consideration of the Council or the Committee on Organization and Policy meeting in Washington, April 27 and 28. The May *Bulletin* will be issued somewhat later than the usual date in order to include a report of this meeting.

Supplementing an item in the March issue, we are informed that the House of Representatives has concurred with the Senate in an amendment providing an appropriation for the reinstatement of the civilian professors dismissed from the United States Naval Academy.

The new section Notes from Periodicals aims to give readers of the *Bulletin* a summary of matters related in a broad sense to higher education in the current journals. Suggestions in regard to this plan and the choice of material will be welcome.

NOTES AND ANNOUNCEMENTS

Federal Aid for Education

The Public Works Administration has allotted more than $94,000,000 in grants and loans for the construction and repair of school buildings, universities, and colleges. The Federal Emergency Relief Administration is employing more than 40,000 teachers on six kinds of projects, including the provision of general adult education, the teaching of persons in need of vocational education, and emergency schools. The Office of Education is developing an educational program in cooperation with the War Department for the emergency conservation work or Civilian Conservation Corps. This involves the selection of educational advisers for most of the 1468 camps.

Science in the Recovery Program

Among the Federal projects approved by the Public Works Administration, five allotments indicate a recognition of the value of scientific research as part of the recovery program.

Two allotments were made to the National Planning Board. One of $35,000 provides for a program to discover, correlate, and study the researches and surveys now being made throughout the country on such subjects as natural resources, population distribution and trends, health problems, local planning, and any other field which has a direct bearing on national welfare.

A second allotment of $250,000 to the National Planning Board is to stimulate the preparation of state, regional, local, and city plans by sending technical advisers out to visit the local communities.

The Bureau of Chemistry and Soils, U. S. Department of Agriculture, received $70,000 for the construction of an industrial farm by-products laboratory at Ames, Iowa, where the state agricultural college and experiment station are located.

An experimental study of stream pollution in the upper Mississippi River is provided for by an allotment of $15,000 to the U. S. Bureau of Fisheries. This Bureau also received $127,300 for the survey and improvement of streams and lakes in various sections of the country and to provide a scientific basis for such operations.

A new project of the Civil Works Administration includes the exploration of archeological sites in five different states: Florida, Georgia, North Carolina, Tennessee, and California. The work of excavation will provide employment for a total of approximately 1000 men.

Allocation of more than $1,750,000 of funds for new construction on government property near Beltsville, Maryland, as a part of the Public

Works program, will enable the U. S. Department of Agriculture to develop there a model experiment station for agriculture.

A national experiment in land use, devoted to studying the prevention of soil erosion and providing for removal from cultivation of submarginal land instead of the average land required in the crop reduction programs, is being undertaken cooperatively by the Replacement Crops Section of the Agricultural Adjustment Administration and the Soil Erosion Service of the Department of the Interior. The experiment was authorized upon the recommendation of Secretary of Agriculture Wallace and Secretary of Interior Ickes. It will cover two million acres of land in ten different regions.

The Bureau of Fisheries was allotted in August by the Public Works Administration a sum of money amounting to $309,000 to be expended on some 37 projects including repairs and reconditioning to fish hatcheries, repairs to vessels, improvement to Alaska salmon streams, and the enlargement and continuation of new construction at four hatcheries.

Journal of the Washington Academy of Sciences, vol. xxiv, No. 2

N. R. A. Code for the Textbook Publishing Industry

A proposed code has been the subject of a recent public hearing in Washington. The rule in regard to college textbooks is as follows:

Rule 18. *College Textbooks.*—In marketing through retail distributors so-called college textbooks intended for use in educational institutions of collegiate grade:

(*a*) Full unit credit of invoice cost f.o.b. publisher's shipping point shall be given not to exceed 40 per cent of the total number of copies of each title purchased or 20 per cent of the gross purchases of college textbooks from a given publisher within 90 days of the date of publisher's invoice at the option of the publisher, to those retail distributors who agree to purchase new college textbooks directly from the original publisher and not otherwise, and who further agree to handle no competitive second-hand textbooks or second-hand textbooks of the same title except those purchased from the students of the institution or institutions which the said retail distributor directly serves.

(*b*) To all other retail distributors not entering into agreement as specified in Clause (*a*) of this Rule, full unit credit of the invoice cost of new textbooks returned f.o.b. publisher's shipping point shall be allowed not to exceed 20 per cent of the total number of copies of any one title purchased within 90 days of the date of the publisher's invoice.

(*c*) Nothing in Clauses (*a*) and (*b*) of this Rule shall prevent the unrestricted acceptance of returns from summer school orders if such returns are made not later than the end of the calendar month following

the close of the summer-school session; from stocks of retail distributors in bankruptcy or from retail distributors who have become insolvent or who are believed to be insolvent; from retail distributors who have ordered the title on misinformation respecting the course for which the textbook was ordered; or where it can be proved the course for which the textbook was ordered has been abandoned; provided on any return as stated herein a handling charge of 10 per cent may be collected by the publisher.

(*d*) In any case of agreement as to returns, such an agreement shall not modify the publisher's usual terms of credit.

(*e*) No returns of any textbooks shall be accepted from a wholesaler of second-hand textbooks.

(*f*) Returns for credit of any old edition, when the same title in a revised form is ordered, may be accepted only if the retail-distributor has ordered the old edition within the same or immediately preceding college year.

(*g*) No returns of displaced college textbooks either new or second-hand shall be accepted for credit from any retail distributor or from any educational institution of collegiate grade.

(*h*) So-called desk copies or gratis copies of college textbooks for the use of class instructors in educational institutions of collegiate grade shall be recorded for shipment by the publisher in the same manner as textbooks which are regularly charged, and not more than one such desk copy of a given textbook shall be furnished without charge to any one class instructor in any given college year.

Federal Support of International Council of Scientific Unions

House of Representatives Bill 6781 introduced by Representative Bloom of New York provides an appropriation of $9000 for the fiscal year ending June 30, 1935, and annually thereafter such sum as may be necessary to pay the annual share of the United States as a member of the International Council of Scientific Unions and associated unions. This Bill has been referred to the House Committee on Foreign Affairs, Representative McReynolds of Tennessee, chairman. It is supported by the National Academy of Sciences and the National Research Council.

The Scientific Unions referred to deal with the fields of astronomy, chemistry, geodesy and geophysics, geography, mathematics, physics, and radio, covering thus practically all of the physical sciences.

No part of the contributions is used to pay the expenses of the delegates to the various meetings of the Unions, nor for salaries of major officers of these Unions, the entire sum being used for the routine ex-

penses of the International Secretary's office, the publication of the proceedings of the Unions, and the reports of various committees and the necessary expenses of these committees.

Among the general accomplishments of international cooperation may be listed such items as:

(1) Establishment of standard time.

(2) Maintenance of standards of weights and measures, and other physical and chemical standards essential to scientific work as well as to international trade.

(3) Agreement on the definitions of scientific terms, which enter into the understanding of the work of other nations, as well as into the preparation of specifications for various industrial products.

(4) Preparation of maps, on a coordinated international plan, and the introduction of new methods for surveying and mapping.

(5) Cooperative study of scientific phases of radio broadcasting.

(6) Visits to industrial laboratories and the examination of various natural resources, geological formations, and geographically important localities.

General Education Board, Annual Report

The annual report for 1932–33 just issued states that in the field of college education the Board until recently has continued to cooperate in carrying out promising plans for the improvement of the quality of undergraduate work through changes in curriculum and in methods of teaching and administration. But during the last years, grants in this field have been for the most part to ensure the continuation of projects in jeopardy because of loss of support.

With the change in economic conditions, the General Education Board, in common with other agencies devoted to public welfare, has been considering how its resources may best be used in the solution of the problems of personal and social adjustments to which the depression has given emphasis. Toward this end, it was determined to undertake a review of the major aspects of educational endeavor in the United States. Though the conclusions to which this survey pointed have not yet been fully developed in the activities of the Board, the Board has approved plans for the improvement of general education, for research in the field of child development, and for more intensive work in certain restricted fields in the South.

The appropriations made by the Board in 1932–33 amounted to nearly $2,500,000, all chargeable to income. Among them the following may be noted:

The Progressive Education Association, with the cooperation of a num-

ber of colleges, has inaugurated a plan by which students from about thirty of its member schools will be admitted to college, during an experimental period of five years beginning in 1936, on the recommendation of the principals of these schools rather than on the basis of satisfaction of standardized subject-matter requirements. The students so admitted will be given special observation in an effort to reach conclusions as to the significance of general capacity to do work of college grade in contrast to records in specific subjects now required for college entrance.

For support of work in medical science grants were made to Columbia, Washington, and Western Reserve Universities.

Southern Education. A grant was made for the maintenance of a summer institute at Alabama College, also grants for the George Peabody College for Teachers and the Universities of New Mexico and North Carolina.

Negro Education. Grants were made to Atlanta University, Fisk University, and Meharry Medical College.

Other Projects: Antioch College, in support of the work of the extramural faculty; Harvard University, for the cost of continuing a study begun some years earlier on the physical growth and mental development of children during the years of their normal school life, that is, approximately from six to eighteen years of age; American Council on Education, for cooperative planning of educational studies.

Pan-American Union, Division of Intellectual Cooperation

Among the means utilized by this Division in carrying out its purpose is the promotion of the interchange of professors and students. It also arranges for the interchange between schools of publications, and of letters, albums, etc.; study tours; art exhibits; congresses; the preparation of directories of cultural and scientific associations, and the maintenance of card indexes of writers, archeologists, historians, artists, educators, and in general all those persons who figure prominently in the intellectual life of our American nations.

Although fewer persons were traveling last year, contacts were made for a number of educators visiting countries of the Union other than their own. Numerous inquiries were received from students in various Latin-American republics and several in the United States who desired information as to foreign universities or professional schools suitable for their purposes, assistance in securing admission, and in a great many cases scholarship aid. A number of state institutions remit the nonresident fee or grant special scholarships to Latin-Americans.

The card index of individuals eminent in the arts and sciences is con-

stantly being augmented, and work is progressing on a directory of learned societies and academies which was started some time ago. It is hoped to mimeograph a tentative directory during the coming year.

Conditions in the Universities of India

The decision of the German Government to make drastic reductions in the number of students in the universities, technical colleges, and other establishments which prepare candidates for professional life is certain to attract great attention in India, where the problem of middle-class unemployment is most acute. The Educational Commissioner with the Government of India has called attention to the "grave complications" arising from the excessive number of undergraduates, and has pointed to the possibility that the machinery of the universities, which has already shown ominous signs of strain, may collapse altogether.

Except that unemployment is intensified, the picture drawn in 1917 by the then Director of Public Instruction in Assam for the Calcutta University Commission is still true today. He wrote of the constant conflict in educational policy between the government and the people—the one desiring to improve the standard of education, the other crying on behalf of the hungry who were not fed, for the relaxation of standards and the wider spread of education, good or bad. The privileged classes did not take to commerce or industry; the unprivileged followed their lead. It was only by matriculating, wrote the Director, and by taking part in the after-life which had been reserved for those who had matriculated, that the lower castes could raise themselves to consideration. Only so could they raise a representation strong enough to fight for their social and political interests.

The census superintendent for Assam, who tried in 1931 to get figures of the educated unemployed, states that matriculation has assumed much the same importance in the social sphere as a public school education has done in England. The ambition to "make a gentleman" of their son is not confined to the parents of the lower classes of any one country, and in Assam this takes the form of matriculation followed by a job which does not involve manual labor.

The Educational Supplement of the London Times

Reforms in German Institutions of Higher Learning

The U. S. Office of Education has just received information that by virtue of the decree of April 25, the Reich's Minister of the Interior has ordered that the number of students to be admitted to German universities during 1934 be limited to approximately 15,000. This means that

about two thirds of the pupils in German secondary schools preparing to enter universities this year will be unable to do so. The ordinance provides that students eligible for matriculation are to be selected on the basis of intellectual and physical fitness, personal character, and "national reliability." In keeping with the Nazi philosophy that woman's place is in the home, the number of women students admissible to German universities this year is limited to 1500 or ten per cent of the entire number.

". . . New regulations concerning habilitation at Prussian institutions have been established. Henceforth the demonstration of scientific performances or qualifications before the faculty in question will not suffice to secure permission to lecture at a Prussian institution of higher learning. An applicant must have served several months in a field station or a work camp and must have completed a course of training in an academy for the training of instructors in higher institutions of learning, which academy is to be newly created. When these two courses have been completed satisfactorily, a candidate for habilitation in a university or other higher institution will present his credentials to the faculty of the school in question, which will act on his application in the same way as heretofore. In the reorganization of the universities and other institutions, special importance is placed in the training of the oncoming generation of academic instructors. . . . In the work camp the candidate has an opportunity to reveal his true character, in surroundings that are not academic. The testimonial issued by the work service will have great weight in determining a candidate's suitability for habilitation. The *Dozentenakademie* (for the training of instructors) will receive acceptable candidates from the *Arbeitsdienst* (work service) and will provide regular courses for candidates seeking admission to the various departments of the university. In this academy, candidates will participate in a strictly organized community life and will study courses of a general scientific character. Here, again, the candidate will have to prove his worth in fields outside his specialty. As a result of close collaboration with his fellows in the academy, a candidate is expected to develop the general impulses requisite for his scientific work in his specialty. The examination of the candidate in his specialty, which follows in due course, is, according to the new regulations, only the final step in the habilitation procedure. It is emphasized that no one will be selected as instructor solely on the basis of his capacity in his scientific specialty."

School and Society, vol. xxxix, No. 999

Anglo-American Institute of the First Moscow University

This is primarily a summer school for foreign students, teachers, and others, who are interested in education and social life of the Soviet Union, beginning July 15 and extending to August 26.

All instruction is in English under the direction of a native faculty with an advisory American staff. Provision will also be made for foreign visitors desiring academic facilities and opportunity for study and research.

Courses are offered in art, education, sociology, economics, psychology, Russian, and aeronautics. Academic work at the University includes four weeks of resident study and two weeks of supervised travel with itineraries arranged to meet professional and academic interests. Living arrangements offer the option of dormitories and regular hotel service. Provision is made for guide and interpreter service, rail and motor travel through *Intourist*, the official Soviet Travel Bureau.

The Anglo-American Institute certifies foreign students for full university credit at the University of Moscow, and the certificate of attendance issued by the University may be presented to the faculty of an American institution for evaluation in accordance with its own policy.

The minimum cost for six weeks including travel is $185, the approximate round trip steamship fare from New York, $180. Further information may be obtained by addressing the Anglo-American Institute of the First Moscow University, 2 West 45th Street, New York.

European Summer Courses

The German Institute for Foreign Students at the University of Berlin offers to Americans from July 12 to August 22 summer courses arranged to conform with courses offered in American universities.

The program includes German language and literature, German political and social history, German art and civilization, political economy, and sociology. The courses are arranged for four classes of students: college undergraduates, graduates working for the M.A. or Ph.D., teachers wishing to continue professional studies, and special students. Lectures, discussions, excursions, and social gatherings will be included in the program, with visits to museums and industrial plants. At the end of the course a visit to Oberammergau is planned.

An announcement has also been received of a summer school in Vienna, July 9 to August 19.

The ninth annual session of the seminar in Mexico, held under the auspices of the Committee on Cultural Relations with Latin America, will be held in Mexico City and in Cuernavaca, July 10 to 30. The pro-

gram is organized in the round tables supplemented by lectures and field trips. Full information may be obtained from the Executive Director of the Committee, 112 East 19th Street, New York City.

MEETINGS OF ASSOCIATIONS

American Association of Collegiate Registrars, Cincinnati, April 17 to 19.

American Public Health Association, Pasadena, September 3 to 6.

Society for the Promotion of Engineering Education, Ithaca, June 21 to 23.

American Association of Physical Anthropologists, New York, May 8 to 10.

National Conference on the Education of Negroes, Washington, D. C., May 9 to 12.

Association of University Teachers, Conference for 1934, Oxford, June 29 to July 2. This Association is invited to be represented. Members planning to be in England at the time are asked to advise the Washington Office in the near future.

Inter-American Conference on Education, Santiago, Chile, September 12 to 17.

International Congress of Anthropological and Ethnological Sciences, London, July 30 to August 4.

International Congress of Botany, Amsterdam, September 2 to 7, 1935.

International Conference of Applied Mechanics, Cambridge, England, July 3 to 9.

International Congress of Radiology, Zurich, July 24 to 31.

International Geographical Congress of 1934, Warsaw, August 23 through 31.

International Moral Education Congress, Cracow, September 11 to 14.

International Congress of Philosophy, Prague, September 2 to 7.

EDUCATIONAL DISCUSSION

Science in the World It Changes

. . .The impact of material progress has lessened, destroyed, or prevented the development of social customs and controls which alone enable mankind to live as a social animal. Our researches in industrial relations indicate the serious effects on both production and morale which follow on such simple things as changing the seating in a room and thereby breaking down the accustomed social contacts among individuals at work. We have moved millions into the unknown without reestablishing them in social units. Is it any wonder we miss individual thrift and piety, neighborhood interest and responsibility, old-fashioned personal stability?

In efforts to secure substitutes for neighborhood responsibility and social organization, we are driven more and more into centralized political controls. As these problems are forced on central governments, international efforts for peace and harmony break down. Instantaneous communication causes more friction than it stops. Efforts to confine problems within national borders increase. National loyalties grow of necessity, for the only hope of securing a degree of social stability compatible with continued progress is through national efforts at self-control. Here is one of the greatest reasons for the growth of economic nationalism so deeply deplored at Geneva.

Can these rapid processes of change be kept from upsetting our whole structure? If so, science gives complete assurance of continued progress in material things and of the leisure out of which we may develop a great civilization.

Conflicts between security and progress are always present. The point is that less than 200 years of applied science, just because they brought great progress, have brought great instability. This instability threatens to destroy civilization. It is not a time for despair, nor is it time to stop the quest for knowledge. Rather is it a time for sober thought and plain speaking; for wise direction of progress toward increased knowledge. We need the combined efforts of many groups, particularly in the universities, to bring about social and economic stability. Otherwise our unplanned activities will increase the stresses and strains on an already unstable nation and civilization.

If I appear to emphasize the disturbing consequences of scientific progress, I beg that you credit me with the intention of being constructive. If later I emphasize the responsibility of the scientist, you will find reason for this emphasis in the fact that I am addressing scientists and engineers and not assume that I seek an alibi for the group to which

I personally belong. In an address[1] last year I dealt with the collapse of business leadership and the responsibility of universities for this collapse. I assure you I was no less frank and rather more critical in that address than I am now. . . .

Most scientists assume that increase in knowledge is intrinsically and inevitably good. Others, a little more objective but still without vision or understanding of the complexity of social problems, conclude that failure to keep it good is the fault of personal devils outside the scientific group. Usually they blame business men or politicans, believing that they should and in time will be exorcised by the incantations of the high priests of pure science and the vast chorus of the faithful in applied science and technology. Natural science prides itself on the impersonal and objective nature of the Increase of Human Knowledge and as a consequence makes little effort to study the hopes, fears, and needs of humanity. It does its duty, as it sees it, when it adds to our grasp of natural laws and multiplies the options open to mankind in the use of material things. It forgets that at least in the western world the God of the Multitude must always be a personal God, responsive to the hopes and fears of His people. The case for the goodness of Human Knowledge Increased through the natural sciences is far from established. In my opinion, it is unlikely to be established, unless the search for knowledge is socialized, much as the Jehovah of the Old Testament was humanized by Christianity.

Science looks at its vast accomplishments and at huge, unconquered areas ahead. It recognizes that what has been done is a small beginning. Scientists are humble before the great God of Knowledge. So long as they leave untouched the great questions arising out of the impact of scientific accomplishment on the social organization of civilization, do they not by that fact arrogantly assert that there is no God but Knowledge and that science is Its handmaid?

Science is self-centered. Too often it assumes that the logic of natural science is the universal logic. One sees repeated statements that social jobs would be done better if left to engineers, that leaders in other social groups are incompetents who do their tasks on a reprehensibly low level.

Science assumes that social science could, if it would, progress by building brick on brick. The quicksand of uncertainty in the world of social relationships is forgotten. There is little realization that scientific logics developed under conditions which allow isolation and control of individual variables furnish no foundation for social sciences. There is no general understanding of the logical and practical limits within

[1] The Failure of Business Leadership and the Responsibility of the Universities. *Harvard Business Review*, July, 1933.

which we must approach deep sentiments and emotions. It is forgotten that the human race evolved without a logic for countless years and that since systematic thought began, it has used its logic mainly to rationalize hopes, fears, loves, and hungers; its social forms as modes of achieving the good and exorcising the evil.

The failure of science to take into account these deep-seated emotions, indeed its habit of brushing them aside as on a lower level of activity; its failure, in a scientific colleague's phrase, to understand the value and importance of nonsense is amazing lack of perspective. . . .

When, as in many aspects of social problems, quantitative measurements are impossible, alternative modes of approach must be worked out. So far as I know, it is only recently in biochemistry and physiology that chemistry itself has tackled the great difficulties involved in the simultaneous study of many variables all in a state of flux. Great logical difficulties must be solved in such subjects as well as in the social sciences but in the latter field the difficulties of measurement are far greater. Social science makes little progress by considering in isolation one factor like demand on the false assumption that supply will remain static; nor can it isolate economic problems from administration and politics at the stage where policies must be determined and carried out. Continued intellectual progress in the natural sciences is simplicity itself compared with the complex problem of understanding and controlling wisely the novel social forces, stresses, and strains loosed on a world of sentiment and emotion by the progress already attained in these sciences. The superior attitude so often adopted by natural scientists toward their colleagues in social science and toward men of affairs who seek stability and progress in business and politics has no justification. It ignores the immensely greater difficulties they face.

When scholars and practical men face such difficulties, it is no alibi for science, the conqueror, that others are responsible for making good use of knowledge. Rather, under such circumstances, it is the responsibility of science to minimize the difficulties it imposes on social science and administration. The direction which increase of knowledge shall take is of first importance and a large part of that problem of direction is within the control of science. Workers in natural science have almost unlimited fields from which they may choose where to direct their abilities. At best they will add new social stresses, but at best also they may relieve great social problems and simplify the tasks both of students of society and of practical administrators. . . .

WALLACE B. DONHAM
The Technology Review, vol. xxxvi, No. 5

Our Tradition of Institutional Individualism

The policies and operations of our colleges, universities, and other higher schools have been characterized by extreme institutional individualism. Intense loyalty to single institutions rather than to higher education as a whole has opened the way in almost every instance to expansion of functions and facilities up to the limit of obtainable funds and often beyond the limit of available funds. Few universities or colleges have exercised that healthy self-restraint which enables them to select and perform a few important services with excellence. But those which have possessed this rare quality have demonstrated that an institution with a small income may become rich, for wealth as opposed to poverty attaches to an educational institution whose functions, well performed, are held within its real duties, its expenditures within its secure income. No matter how large the budget, an institution is educationally poor and unworthy when it assumes one service more than it can perform with superior quality. It is stricken with poverty when its expenditures are constantly permitted to press hard upon income and consume adequate balances or safe reserves. . . .

Whatever its beginnings, three phases of present-day institutional individualism are worthy of note: rivalry in imitation, lack of adequate cooperation for social functioning, and inadequate regional or national consciousness.

Too often when higher institutions look at their neighbors to find out what those neighbors are doing, the purpose is not to avoid the duplication of functions but to rival or surpass through imitation. This is the besetting professional sin of our higher academic planning. . . .

So long as the American aspiration for education was served, however inadequately, with the facilities provided, as was the case in pioneer days, ambitious institutional individualism probably served the country fairly well. It contributed its share to the enlargement of higher educational opportunity among a democratic people. But the rivalry of church foundations and the pride of state and community establishments exerted a psychological effect to deprive higher institutions of whatever adaptability they may once have possessed. . . .

In the situation that now exists in America, how could there be anything that might properly be regarded as an organized system of education serving a region or the nation? . . . Few colleges and universities look with level-eyed sympathy at their neighbors in an attempt to understand the national or regional need and to appraise their own relative place and usefulness and that of other institutions in meeting it. . . .

Inasmuch as our Constitution leaves to the separate states the providing of education as their particular responsibility, it might be assumed

that there would have evolved in the last century and a half something approaching a true system of higher education. This, however, is not the fact. Although the causes need not detain us here, it should be noted that, while most states provide higher education at public expense, they also charter independent foundations to operate in much the same field. Yet, in these two branches of one of the greatest of public services within any given state, there is little community of conscious interest that might tend to make both public and private institutions sympathetic with the service each can and does perform. . . .

The situation would be far different if every institution of higher education were to regard itself as merely one instrumentality in a larger group of agencies, which together serve a locality, a state, a region, or the nation in teaching, in research, and in practical advisory service. Once this view is adopted, wasteful rivalry gives place to effectual cooperation, and a new pride in quality supersedes the delight in size or numbers which now renders us completely oblivious to the mediocrity of much we do. . . .

General or liberal education which prepares young men and young women for intelligent membership or neighborliness in the common life of American civilization usually terminates with the second or sophomore year of our American four-year college. Here true secondary schooling ends, and thereafter concentration or specialization begins. Through this point there should be no limitation of attendance. The lower division or junior college should so adapt its methods as to make its cultural or civilizing purposes more fully and more widely attainable by all enrolled, regardless of aptitude. The chief purpose of our secondary education is to educate the citizen for happy and effective participation in that community of understanding and cooperation which must sustain the best in American civilization. For the sake of our national life, secondary education in this sense can be withheld from none. . . .

Although secondary education up to and including the junior college level should be open to all, in the senior college, the work of which extends from the beginning of what we usually call the junior year to the award of the bachelor's or the master's degree, limitation of enrolment is both appropriate and practicable. At the senior college level the main purpose is still related to common living; it is quite unrelated to specialized professional school education, which parallels or follows the senior college. Moreover, that purpose is differentiated from the chief purpose of the junior college by the fact that the junior college aims primarily at achieving a civilized "followership" in matters of the common life, while the senior college aims to provide for that common life a highly civilized leadership.

Limitation of attendance on the upper division level does not ensue

from the limited usefulness in society of persons who proceed thereto. It results rather from personal limitations of ability which characterize human beings for the exercise of leadership of their fellows in matters of common concern. A democracy can not have too many of such leaders. . . . Limitation of attendance in the senior college becomes a matter of judging whether in each case the individual has the character, interest, intelligence, and understanding to warrant the social investment of money, energy, and time involved in a senior college education.

Today selective requirements for admission to what we commonly call higher education are administered at the beginning of the freshman or first year of the four-year college course. Because our freshman and sophomore years should mark the termination of liberal and fundamental education, these requirements would be more properly set two years later, at the beginning of our junior year. But merely to transfer our traditionally established modes of admission upward by two years . . . is to fail. Whatever judgments should be made between the end of general education and the beginning of liberal specialization should be based upon a far broader estimate than can be obtained from a numerical or literal analysis of previous academic accomplishment and an adequate quantity of marks of recommended grade. . . . Leadership requires character, interest, intelligence, and broadened understanding, as well as preliminary intellectual preparation. . . .

The traditional American university is capped by the graduate and professional schools. The principal function of these schools is to educate specialists for the strategically important social services required by modern civilization with due regard to the numbers needed by society. Among the specialized callings for which the university (in this sense) educates are research, teaching, the ministry, the law, medicine and surgery, engineering, and similar professions. Here the aim of education is expertness in particular social services which are vocational. The selection of those students who are regarded as promising material for specialized professional education now takes place in many cases at the conclusion of the senior college years. The more rational consideration of the university problem as a whole would advance this selection to a point as early as the conclusion of the course for education for social intelligence, in other words, to the beginning of the present junior year, which corresponds to the first year of the senior college or upper division. . . .

HENRY SUZZALLO

Carnegie Foundation, Twenty-eighth Annual Report

Coordination of British Scientific Services

In his recent presidential address to the Royal Society, Sir Frederick Gowland Hopkins referred at some length to the Medical Research Council and its relations to the Agricultural Research Council and the Advisory Council of the Department of Scientific and Industrial Research. Stressing the relations which have from their inception existed between the three councils and the Royal Society, Sir Frederick suggested that their creation and the definition of their respective duties and relations had brought into being a great national research organization, to be viewed as a whole and fully worthy of the confidence of the Society and of Great Britain. Although even today it is not fully understood by statesmen that endowment of research is among the most profitable of national investments, scientific men are now in real control of scientific policy in Britain even when it deals with enterprises endowed by the State.

This reference to the relations which exist between various research councils and research associations deriving part, at least, of their endowment from the State is welcome in view of certain charges which have recently been brought against them, arising out of the conduct of investigations which are of general interest not only to industry or to social institutions but also to the defence forces of the realm. Two of the most characteristic features of modern scientific development are, indeed, on one hand the extent to which cooperation between different classes of scientific workers—medical men, physicists, biologists, chemists, engineers, and others—is again and again required for the solution of a scientific or industrial problem, and on the other, the extent to which discoveries or advances in one field or industry find direct and ready application in many other quite unrelated sciences or industries. . . .

In view of what has already been said about the general interest of the results of many scientific investigations, it would be highly unlikely that the results of some of the investigations undertaken from purely industrial or medical motives would not have a great interest for some of the fighting services. Equally, in view of the care which any sound administration must take to secure that neither Civil votes nor the Defence votes are used to pay for the same work to be done twice over, it would be surprising to find that no work had been undertaken by the Department of Scientific and Industrial Research or the Medical Research Council at the request of one of the defence services.

As a matter of fact, the evidence even of the examples cited in justification of its charges by the publication to which we refer indicates that the converse may equally be true. Reference is made, for example, to

problems of visual research, on which the Medical Research Council have published a report on "Colour Vision Requirements in the Royal Navy." The results of these investigations, though of special application to service conditions, have also great interest for the merchant marine, the railways, and in relation to road traffic and to some industrial operations.

This matter of visual research illustrates a further possibility which criticism has to weigh. The Medical Research Council has on occasion availed itself of favourable opportunities afforded by conditions in the defence services for the investigation of problems of interest to the Council. This applies particularly in regard to investigations on the value of psychological tests for the selection of personnel for particular forms of skilled work. Such investigations are, of course, initiated directly for the assistance of industry. The investigations on special aptitudes required in rifle shooting were not undertaken at the instance of the military authorities but of the academic psychologist who did the work, and who saw in rifle shooting an operation combining manual, visual, and psychological factors which was particularly suited to his study, and naturally found soldiers the most convenient source of material.

Equally it is unfair to charge the Medical Research Council with financing war research when it borrowed special apparatus and trained personnel from the Chemical Defence Research Department for the investigation of the dust clouds that are associated with particular industrial processes and that are likely to be injurious to the workers. Similarly, the Council has drawn on the special knowledge of acoustical problems acquired by the Services in relation to anti-aircraft defence to assist its work on the physiology of hearing, which is primarily aimed at the alleviation of deafness.

Nature, vol. cxxxiii, No. 3354

Larger Aims for Physical Education

. . . One has only to give casual attention to vital statistics to realize that the breakdowns coming with increasing frequency among our most highly educated class; that the emotional instability; that the mental disorders of this driven age are due to lack of balance between the mental and the physical. The speeded-up engine is shaking the frail machine to pieces. Much of this is due to the neglect of a sound physical education program by administrations and faculties; to an attitude that this is a matter not worthy of academic rating. Such a position demonstrates ignorance of the fact that much of the listlessness and lack of response among students may be traced to physical causes, such as faulty

nutrition, lack of sleep, and proper exercise. The fatigue element in classes meeting late in the day is not enough appreciated and dealt with. Many instructors teaching in institutions having evening classes mistake for attention the docility due to fatigue. Such situations are remedied where there is proper cooperation between departments.

Other departments have their contribution to make to the department of physical education. The department of chemistry should study the proper chlorination of swimming pools, should advise concerning the chemistry of foods, and render other expert service; the biology department should make a distinct contribution in the fields of physiology and personal and social hygiene. The departments of psychology and physical education have much in common. Researches on specific items in the psychology of athletics have been initiated in the last few years. There is not much factual data at hand, but the work is progressing. Work may be done to find if there are any special aptitudes for athletics in general, or for special kinds of athletics analogous to a special talent for music or drawing. Through psychology may be determined the significant elements in staleness, *esprit de corps*, motivation. The two departments can together contribute much to student welfare in devising and applying proper tests of emotional stability. Along these and many other lines departmental cooperation will produce highly desirable results. . . .

And this brings us to the consideration of departmental organization. Naturally, but unfortunately, work in physical education and athletics grew up in most of our institutions as a thing apart. Many times this was due, not to the desire of those promoting the physical interests to have it so, but because of hostility or lack of interest on the part of those having the curriculum in hand. That point has, however, been passed, and today we realize that there should be the same departmental organization in the physical department as in all others. The work in physical education, athletics, and health should be under one competent head with full professorial rank and with fine professional training, and associated with him should be various specialists, in so far as possible appointed upon a full-time basis, as in other departments. . . .

Usually when we speak of the duty of teachers of physical education in providing means for the proper use of leisure time, we have in mind training the student in the technique of carry-over sports, such as golf, tennis, and swimming. Such a program is good, but it is not broad enough. There is much food for thought in that sentence, "Leisure should not be just time to play." From the opposite conception comes our attitude relative to "killing time," the "tired business man," and the rest. Out of leisure time properly spent have come the greatest achievements of civilization. As Henry Ford recently said, "To be out of hire is

not necessarily to be out of employment." Some men who have been out of a job during the past three or four years have spent their enforced leisure time in hopeless inactivity; others have improved their minds; have devised means of useful employment; and in numerous instances have done creative work of a much higher and more renumerative type than could have been expected. Thus the great opportunity is not merely to teach people how to fill their leisure time with play. It is to build up in students that abounding physical and mental energy which shall give them the vigor to do creative, constructive things in their leisure time. Thus equipped, they will not be under the necessity of contributing, as do the unfit, altogether too much to hired entertainers or to find their only relaxation in play. The coming generation must be more resourceful, more alert, more fit than any which has preceded it. It must go out from the college halls with a spirit of high adventure and the strength to realize its dreams, if the new day for which we all so greatly yearn is to become a reality. . . .

WILLIAM MATHER LEWIS
School and Society, vol. xxxix, No. 996

REVIEWS

Year Book of Education

The Year Book of Education, 1934, Lord Eustace Percy, Editor-in-Chief; London: Evans Brothers, Limited; 935 pp., 35 /-net.

This third volume of the Year Book not only maintains its place as the most comprehensive single volume source of current information concerning education throughout the world, but inaugurates new features, such as a survey of secondary schools in all English-speaking countries.

In Part I each of the eleven chapters provides a survey of contemporary educational conditions in the principal divisions of the British Commonwealth and of the United States. Other sections deal with various specific aspects of school administration and with the educational systems of foreign countries.

In Part II the first section outlines current developments from the point of view of effects of the economic emergency; Section II makes an ambitious survey in 18 chapters of secondary education in Great Britain, Canada, and the United States. Section III, under the suggestive heading of "Creative Education" is divided into six chapters, among which are those on "Education Outside the Schools" by the Editor-in-Chief, "The Dynamics of Adult Education," and "An Empire Centre for the Study of Education."

In evaluating the influence of contemporary social evolution on education, the Editor observes:

"In this chaotic development of voluntary initiative and experiment, embracing much that can not be regarded as education in any real sense, it may be difficult for the 'educationist' to discern any great hope for the future. It obviously represents a great educational opportunity, but to many people it will seem an opportunity to bring new drilled battalions into the trench warfare of the organized schools, rather than an opportunity for an educational advance into new fields. Yet the very opportunity, on its present scale, is a demand for something new, for it marks a breakdown—and, the opinion may be hazarded, a permanent breakdown—in the old social and economic machinery of the nineteenth century. A reconstructed economic and social order must make new demands upon organized education; and the nature of those new demands is more likely to become evident, first of all, outside the walls of the schools than inside them. It is the institutions of organized part-time education, maintained by the local education authorities, which will first feel the impact of this new demand, as indeed they are already beginning to feel it; and it is no doubt true that purely volun-

tary educational work will be able to do little more than prepare new bodies of students for the teaching of these organized institutions. But such students, as they come forward, will, in all probability, force a far-reaching change in the character of these institutions. They may, indeed, find it wholly impossible to cope with the task unless they develop themselves from technical schools, giving a certain amount of non-technical teaching, into Local Colleges embracing the whole range of part-time education, both for juveniles and for adults."

Concluding a section dealing with various means of adapting educational processes to changing needs, the Editor also makes the highly significant proposal for the focusing of educational interests of the British Empire in a single centre of study. He contends that all parts of the Commonwealth need to pool their ideas and consider their future policy.

"It may be a dream, but it is at least significant, that London, which those nations are not ashamed to regard as the centre of the British Commonwealth, has at last provided itself with a University Institute of Education which can have no ambition to substitute itself for university Departments of Education and institutions for the training of teachers either in the Dominions or in Great Britain itself, but can, perhaps, legitimately aspire to be a centre of research and a focus for the culture of that Commonwealth."

In Section IV is summarized in some 40 pages descriptions of the methods of selecting textbooks in every part of the empire. Among other divisions of Part II is a section discussing comprehensively the educational systems of Austria, Spain, Finland, and the Catholic schools in France.

Such a compilation of over 900 pages is obviously a mine of information, which deserves to be more widely known among the members of the academic profession in this country.

Carnegie Foundation, Annual Report

Sections of special interest in this report, following the discussion of "Our Tradition of Institutional Individualism" by the late Dr. Henry Suzzallo (see extracts, page 235), may be noted in the following summary:

Dr. H. J. Savage, in the discussion of "Supplementing the Retiring Allowances of the Foundation" states that Rule 10 as amended and interpreted now permits part-time work to be undertaken by retired teachers for compensation. An inquiry has been made into the extent to which institutions are now availing themselves of this provision. Of eighty-eight institutions from which information was requested on the question, "To what extent is the principle of supplementing the retiring allowances of the Foundation recognized?", nineteen have no plan,

formal or informal for supplementing the retiring allowances of the Foundation, "make no individual grants to this end, and do not avail themselves of the provision of part-time teaching by recipients of retiring allowances. Of the remaining sixty-nine institutions, twenty have no formal plan although individual cases are considered on their merits and institutional grants made accordingly, while forty-nine universities and colleges have definite plans for supplementing the retiring allowances of the Foundation. These forty-nine institutions may be divided into three groups: The first group consists of twenty colleges having contributory plans but no guarantee concerning a minimum retiring allowance. The second group of seventeen institutions has in operation retirement plans which may be used to supplement the allowances of the Foundation The third group of seventeen institutions supplements the retiring allowances of the Foundation without contributions on the part of the teachers. In this group, five universities require no contributions from their teachers although such contributions are optional. Hence, these five institutions are deducted from the total group of fifty-four institutions, leaving a working total of forty-nine."

A list of these institutions follows, and then a discussion of types of supplementary provisions including informal arrangements, contributory plans with guaranteed minimum, contributory provision without guaranteed minimum. Brief summaries are given of plans now in force in twenty-eight institutions. The conclusions of this paper are:

"In 1906, when the Carnegie Foundation for the Advancement of Teaching was incorporated, eight colleges and universities in the United States and Canada had pension plans (California, Columbia, Cornell University, Harvard, McGill, Randolph-Macon Woman's College, Toronto, Yale). So far as information serves, the oldest of these was the plan of Columbia University inaugurated in 1890. The pension provided in each of these eight plans was directly related to the salary received at the time of retirement, and in most instances was based upon it. Of these eight institutions, five (Columbia, Cornell, Harvard, McGill, Yale) were included in the first list of 'accepted' institutions issued by the Foundation as of July 1, 1906. Two others (California, Toronto) became associated with the Foundation shortly thereafter. It may therefore be inferred that provision for the retirement of teachers was recognized in a very limited way as a function of institutions of higher education by at least eight colleges and universities of the United States and Canada before 1906.

"After the establishing of the Foundation, this principle appears to have been somewhat obscured. The founding of the Teachers Insurance and Annuity Association, however, in 1918, served to reemphasize it. Between 1906 and 1918 various publications of the Foundation re-

peatedly drew attention to the fact that provision for a sound retirement system was primarily a function of the employing institution. The growth and development of the Teachers Insurance and Annuity Association in the fifteen years of its existence has served to reinforce and exemplify this principle.

"From the present inquiry, two general conclusions may be drawn: First, the fact that out of eighty-seven of the associated institutions at which retiring allowances and widows pensions of the Foundation are being paid, no fewer than sixty-eight make provision, direct or indirect, to supplement these allowances, indicates that the principle of supplementing Foundation retiring allowances is recognized widely by institutions both larger and smaller. Perhaps it may even be inferred that the principle is recognized rather generally that provision for a sound retirement system and opportunity for teachers and administrative officers to participate in it is a function of an employing institution of higher education. In 1906, no pension plan of a college or university was, so far as known, soundly contractual. In 1933, at least 183 such retirement plans in universities, colleges, and schools are both contractual and sound.

"Secondly, recognition has been accorded to the joint contributory principle.

"The extent to which the studies and policies of the Carnegie Foundation for the Advancement of Teaching have contributed to these results is, of course, impossible to state. It seems probable, however, that the work of the Foundation, by both example and precept, has exerted an influence in the field of teachers retirement as it affects institutions of higher education in the United States and Canada."

President-Emeritus Pritchett contributes the succeeding papers, "Why an Insurance Company for Teachers?", "Is Education on the Right Track?", "Do We Need a National Secretary of Education with a Seat in the Cabinet?", "A Slump in the Football Trade".

Part II, Educational Enquiry, begins with a discussion of "The Unit in Admission to College", by Henry Suzzallo and William S. Learned, which is followed by a study of relations of secondary and higher education in Pennsylvania by Dr. Learned. The conclusions of this detailed report read in part:

"From the point of view of useful knowledge affording an adequate understanding of the world surrounding a thoughtful mind, the higher institutions here studied present exceedingly varied results. Indeed, the outcomes are so variable as to make it doubtful whether the simple purpose of assuring to a student confident familiarity with useful knowledge—that is, to 'make him think'—is, after all, their real aim.

"We have seen that a third or more of the college population about to graduate are easily matched by the typical high school senior four years younger than they. Their own high school opportunities must have been passed by largely untouched as the time-credit scheme of education moved them on automatically to the allegedly higher, but actually only later, institution. We have seen that although each institution presents a similar picture of variability within wide limits, certain of them obviously concentrate on an inferior level with results that can only be elementary, while others are dealing chiefly with students who know and can therefore carry their operations much farther.

"The results from the progress group indicate positive gains during the two years for which observations were made. Whether these gains are great or small or normal cannot be known, inasmuch as they constitute the first comprehensive measures of this character to be secured from such a group. The study was unfortunate in being unable to provide similar data from institutions operating on a plan that would contrast with the typical American procedure followed in these Pennsylvania colleges. It is only comparative study of this sort that will eventually assure confidence in proposed improvements.

"However, average gains during the two senior college years that result in raising a score of 92 points, out of 292 in general science, to 104, and 77 points, out of 346 in social studies, to 96, do not appear excessive. And it is almost incredible that two years of constant activity with books should enable the average college senior to recognize only 63 out of 100 well-chosen words as compared with the 56 that he knew as a sophomore.

"Whether these gains be large or small, the real reason for concern lies in the fact that they are, after all, merely averages. The intelligent student, who systematically holds and increases his knowledge, has kept the average on the positive side, but the member of the college community who is incapable or indifferent, and has only held his own or has fallen back, has kept the average down. If the test itself is to be trusted, even as a crude index, the fact alone of these many low or minus scores is evidence that the averages are far too low. Critics of the test urge their own fragmentary recollection of material studied many years ago as an excuse for the deficiencies of such students. But they forget that these seniors are at the peak of their youthful training where, if ever, their knowledge should be certain, comprehensive, and timely. If not, it is certainly the institution that is at fault for giving such aspirants a citation to the company of informed and thoughtful men and women.

"The problem as a whole has many confusing aspects which require long and attentive study. Nevertheless, one fact stands out with

great and increasing distinctness. The American college degree, on its present four-year credit basis of award, possesses but a small fraction of its potential significance in terms of assured intellectual competence. And the sooner institutions that make a business of education frankly divert their recognition from such hollow forms to a just and substantial appraisal of the student at whatever level, the sooner will education be able to justify the extensive demands that it makes on society with a contribution that it can in some real sense guarantee. . . ."

Alfred Z. Reed of the Foundation staff is the author of an extended essay on "Learned Professions and Their Organization", and Secretary Savage of a short discussion on the administration of higher education dealing with the responsibility of the state and with recent expansion of higher education, with the following conclusions:

"It has recently been pointed out that the fundamental functions of the state educational system are to educate the people to greater and greater competency in performing

"First, the general social obligations of citizenship or membership in American civilization required of all men and women, and,

"Second, the particular or specialized services to society allotted to different occupational groups, membership in any one of which is a matter of individual choice and fitness.

"This statement of function points in the direction of the individual as the component of the state. In so far as the tendencies herein enumerated improve the quality of the education available to all the people of a state, they will effect a salutary change in the life of the nation. If they can be furthered, while at the same time the cost of our higher education, paid by all the people, is reduced, they will be doubly welcome."

Part III contains the usual statistical and other information on the work of the year. It is stated that the Foundation's financial support to the Teachers Insurance and Annuity Association has now concluded with grants totalling more than $500,000. During the year ending June 30, 1933, 123 allowances and pensions have become operative, while 75 recipients have died. The average amount of allowances on pensions for professors and officers in the institutions on the associated list numbering 70 has been slightly over $1600, while the corresponding amount for 538 persons receiving allowances and pensions at that date is slightly over $2150. The retiring allowances and pensions are classified by institutions and amounts from the beginning to more than $22,000,000.

Publications Received

Some Problems in the Provision of Professional Education for College Teachers, by Harold Moore Byram; New York: Bureau of Publications, Teachers College, Columbia University, 1933; 210 pp., $2.25.

Internal Administrative Organization in Teachers Colleges, by Robert H. Morrison; New York: Bureau of Publications, Teachers College, Columbia University, 1933; 183 pp., $1.75.

The System of Basic English, by C. K. Ogden; New York: Harcourt, Brace and Company, 1934; 308 pp., $2.50.

The Educational Ideals of Jane Lathrop Stanford, by George Edward Crothers; Leland Stanford Junior University, 1933; 32 pp.

Molders of the American Mind, by Norman Woelfel; New York: Columbia University Press, 1933; 296 pp., $3.00.

Critical Problems in School Administration, Twelfth Yearbook; Washington: Department of Superintendence, National Education Association, 1934; 373 pp., $2.00.

U. S. Office of Education, National Survey of Secondary Education, Bulletin 1934, Number 17: Monograph 4, *The Secondary School Population*, by Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake; 58 pp., $0.10. Monograph 11, *Administration and Supervision*, by Fred Engelhardt, William H. Zeigel, Jr., and Roy O. Billett; 207 pp., $0.15.

National Survey of the Education of Teachers, Volume IV: *Education of Negro Teachers;* Washington: Office of Education, U. S. Department of Interior, 1933; 123 pp., $0.10.

America Must Choose, by Henry A. Wallace; Boston: World Peace Foundation; New York: Foreign Policy Association, 1934; 33 pp., $0.50.

A stirring discussion of three possible courses to pursue, a broad internationalism involving increase of foreign trade through lowered tariffs, a self-contained nationalism compelling the permanent withdrawal of large acreage from agriculture, and a carefully planned middle course between the two extremes.

History of Modern Thought, by Michael J. Mahony; New York: Fordham University Press, 1933; 166 pp.

Annotated Bibliography of Research Studies; New York: Institute of School Experimentation, Teachers College, Columbia University; 15 pp.

Handbuch für das Hochschulstudium in Deutschland, a series of pamphlets on: *Das Studium der Rechtswissenschaft, Das Studium der Deutschen Sprache und Literatur, Das Studium der Philosophie, Das Studium der Biologie, Das Studium der Chemie;* Berlin: Max Stadthagen, 1933.

NOTES FROM PERIODICALS

Bulletin of Association of American Colleges

Boards of Trustees

The December Bulletin includes an extended report on college instruction in art, with an account of recent developments, a discussion of the outlook for the future, and a statement of the arts program of the Association of American Colleges. This is followed by briefer articles on the extent of the divisional development of the curriculum and concerning college trustees.

Of the 640 institutions giving information in their catalogues, one reports a governing board of 257 members, and there are five others having 60 or more, the average being 24. The author of the paper, Alfred W. Anthony, draws the inferences:

"(1) Vast reservoirs of influence and power, but loosely connected with the institutions in ordinary times, are called upon chiefly in the stress of selecting a new president, but otherwise usually simply in a perfunctory way approve, annually, or semi-annually, the doings of the continuing administrations. . . .

"(2) Administrators of institutions which have less than 24, and of those which have more than 24, members should investigate carefully the reasons, if discoverable, for having less, or more, as the case may be, than they have. . . .

"(3) The selection of persons to membership in these boards usually results in the following kinds of qualified persons: (1) Technical educators experienced elsewhere, (2) Graduates, who, having 'passed through the mill,' know its processes and are devoted to its ideals, (3) People of wealth, who are actual givers, or desirable 'prospects,' (4) Men of affairs, whose general experiences promise valuable judgments particularly in problems relating to property and investments, and (5) Some persons of eminence in achievements or genius, whose names, as approving, are supposed to carry weight with the public. . . .

"(4) No ideal size of the managing board has as yet emerged from the experience of these institutions through the past years. This appears strange, and yet seems true. This lack of uniformity and of conviction as to size can probably be accounted for because as yet little has been assigned to, or expected from, the members of these corporations."

Forty-eight of the institutions have each two boards, and in three cases an additional one.

The following distinctions appear:

"(1) In tenure of office: In the 'upper' board election may be for life, while in the lower board it is usually for a brief term of years, from one to five years, and in rotation of terms.

"(2) For purposes of trial, the short service of younger men is decidedly advantageous as a period of training and a sifting-out preparation for membership in the upper board.

"(3) Special honors may be conferred, or implied, by election to the upper board.

"(4) A 'lower' board may be a valuable means of bringing into the corporation the fresher, and sometimes the more fluctuating, sentiments and judgments of recent graduates.

"(5) In three instances 'Advisory Boards of Women' are so named as implying a distinct desire on the part of institutions to take counsel of women, to secure their point of view and their assistance, without giving them actual powers of administration.

"(6) In the case of women's colleges no distinctions as to sex of board members seem to be implied, although the majority of names are obviously those of women; while in coeducational institutions men predominate, though the names of women—usually but a few—also appear, even when no statements are made in the catalogues as to the eligibility of women to membership in the board."

The writer insists that the term "trustee" is a misnomer for members of governing boards, and that if this error, "which actually may distort and hamper functioning, were removed, then the issues respecting small boards or large boards, single boards or bi-cameral boards, boards of educational technicians or of general administrators might be more clearly seen, might be more accurately appraised, and might be more wisely and more soundly determined."

Journal of Higher Education

The leading article in the February issue, by Walter J. Greenleaf, reviews in a condensed statistical analysis American colleges and universities under the title "Higher Education in 1934." Among the figures given is that of 1463 institutions of all types above high school grades, most of which are coeducational, with 213 exclusively for men and 250 exclusively for women. Geographically, 902 institutions are east of the Mississippi, 556 west of that dividing line, and five in outlying parts of the United States. Only three states have fewer than five colleges: Delaware, Nevada, and Wyoming, while more than one-fourth of the total number of institutions are located in Pennsylvania (97 colleges), New York (87), California (86), Texas (81), and Illinois (78).

According to control or support, 34 per cent are public; privately controlled institutions comprise 21 per cent; and denominational institutions, 45 per cent, 12 per cent of which are under Roman Catholic control. Further statistics make this an article valuable for reference.

Among other articles in this issue may be noted those by Lewis A. Maverick on "The Challenge of the Depression"; by Julian S. Duncan on "Medical Education Costs"; G. R. Clapp, "The College Charter"; and J. A. Starrak on "Student Rating of Instruction." In the study of "Coordinating Counseling Procedures," E. G. Williamson and D. G. Paterson describe procedures in operation at the University of Minnesota centering in the "contact desk."

School and Society

In the issue of February 3, the following articles may be noted: "Citizenship Training at the College Level," by E. J. Ashbaugh; and "Shall the Colleges Be Closed?" by Irwin J. Lubbers, in which the writer presents six alternatives confronting the average undergraduate college at the present time.

"William James' Philosophy of Education," by Maurice Baum, is the leading article in the issue of February 10. The author points out that James expressed convictions which constitute a philosophy of education in various addresses at commencements and reunions, in addition to his well-known paper on "The Ph.D. Octopus." The essence of his educational philosophy is an emphasis upon the individual and upon the development of points of view and active intellectual interests as contrasted with the mere acquisition of information. The statement of the philosopher is quoted to the effect that:

"What doctrines students take from their teachers are of little consequence, provided they catch from them the living, philosophic attitude of mind, the independent, personal look at all the data of life, and the eagerness to harmonize them."

The issue of February 17 contains an address given by Joy Elmer Morgan at the Ninth Annual Convention of the National Student Federation of America, Washington, D. C., December 29, 1933, on "Youth and the Crisis in American Life," from which the following excerpt is taken:

"The schools today are under the stress of four great pressures.

"First, the imperative demand for a lengthened period of schooling. Responsible public commissions in two of our leading states, California and New York, have suggested that possibly the period of free and universal schooling should be extended two years beyond the present high school, making a total of 14 years of formal school opportunity for our population.

"Second, the schools face the necessity for a higher quality of education if they are to maintain their self-respect and keep pace with the life around them.

"Third, the schools face a sudden and terrific reduction in their finan-

cial resources, which makes it doubly difficult to bring about the internal improvements in education demanded by these times.

"Fourth, there is a very real and far-reaching effort on the part of our giant industry and business directly and indirectly to dominate education so as to destroy its freedom to deal with the great social and economic problems which require intelligent study for their solution.

"Of these problems the immediate task of school finance may seem most pressing, but it is only apparently so. It will do us little good to keep the schools open if we can not maintain their freedom, vitality, and excellence."

In the contents of the issue of February 24 may be cited the article "In the Liberal Arts College—The Reference Librarian, A Professor?" by Paul Allen and an informing discussion of the "Difficulties Facing the Higher Education in Bulgaria," by Joseph F. Roucek.

The issue of March 3 presents statistics showing the number of individuals from various universities and in the various fields of science listed in the volume "American Men of Science." Professor Carl C. Brigham discusses policy and procedure of the College Entrance Examination Board, and a brief summary is printed of the discussion of President Ruthven in his annual report on "Relation between Faculty and Administration." This relation is indicated in the following statement:

"Dr. Ruthven believes that a business can properly place all executive duties on directors, because in a corporation only the management, and not the employees in general, is responsible to the stockholders; in a school, however, the trustees, administrators, and teaching staff are all responsible to the student and society.

"Members of faculties are supposedly educational experts. They may, then, be safely trusted not only to discuss policies and administrative procedure, but actually to take part in administration and to exercise executive authority in the educational field. If the educator is as interested as he should be in the progress of his profession, he will profit by opportunities to test his opinions and experiment in educational procedures. Common sense would dictate that this conclusion does not mean that every staff member can be a law unto himself or that an institution can operate with every person trying to be a dean. It does mean, however, that, within properly circumscribed spheres, every member of the staff would have administrative responsibilities and that the faculties would assist in executive activities.

"At the University of Michigan, it is believed that proper participation in administration is accorded the faculty by placing each school or college under the direction of a dean, assisted by an executive committee selected by the regents from a panel nominated by the faculties, and by

placing other activities under directors assisted by advisory committees selected by the president from panels nominated by the university council. It is further believed that, as far as possible, each staff member should be given administrative responsibilities and that every effort should be made to give executive officials time for instruction and research. The curse of modern university administration has been the attempt to set up two groups of staff members—the administrative and the instructional. Much of the discussion has been academic and the distinctions often imaginary, but a tendency toward a double staff has been discernible. It is believed that the best interests of education will be served if our universities are operated by closely knit organizations of educators rather than by dual staffs of instructors and executives."

In the section "Educational Review," Dr. McAndrew devotes two characteristically lively columns to the Report of the Committee on College and University Teaching, and the Report on Required Courses in Education presented at the Annual Meeting in 1932. Concerning these he observes:

"The two reports are milestones on the road of educational history much more worth preserving than the tracts printed when proposals to set up normal schools were gaining strength. They create a superb project for the foundations to finance. They indicate an opportunity for some heroic professorial Walter Reed to volunteer for inoculation with the virus of pedagogical science."

American Teacher

The February issue contains an article by Howard M. Groves of the University of Wisconsin on the purposes and function of a teachers' federation in a university. The University of Wisconsin chapter is one of the few exclusively college locals of the American Federation of Teachers, and was organized three years ago. Professor Groves in his article includes a section on criticism of the Federation, in which he makes an interesting comparison between the Federation and the American Association of University Professors, reading in part:

"The American Association of University Professors does not perform the functions which the teachers' federation aspires to perform. Although it offers a junior membership to assistants and instructors it has never made an appeal to this group. The professors' organization for the most part does not focus upon local campus issues. It offers no protection to its members so far as their economic status is concerned. The organization is a strictly professional one and has no outside affiliations. Most important of all perhaps the Association has no point of view and holds no opinions regarding economic institutions. As

previously stated the teachers' federation has a point of view and does take a side on at least some very fundamental economic issues."

Harvard Teachers Record

The *Harvard Teachers Record* for February is a commemoration of the one hundredth anniversary of the birth of President Eliot, reprinting his article on "Education for Efficiency," which is followed by an article by Professor P. H. Hanus, and brief tributes by other persons.

Research Bulletin of the National Education Association

Forms of Taxation

The January issue discusses various forms of taxes including income, sales, chain store, corporation, franchise and license, severance (on the privilege of severing natural resources from the earth), inheritance, estate and gift, state property taxes, state tax surveys, and state tax administration. In the summary of principal findings it is stated that the number of states taxing personal incomes and the number taxing corporation incomes more than doubled between 1928 and 1933. In the latter year 24 states taxed personal incomes and 26 taxed corporation incomes. In 1928 four states levied a general sales tax, in 1933 the number increased to 17. There is a growing tendency to earmark personal and corporation income taxes, general sales taxes, and chain store taxes for the purpose of state school support. Brief statements are given for particular states, and a bibliography follows.

National Student Mirror

In the February issue, the Editor of the "Columbia Daily Spectator" discusses the question "Should Student Publications Be Censored?" Among the arguments for unrestricted student control of these publications, the following may be noted:

"In this country, college publications for the most part suffer from a rigorous, iron-handed censorship which has its counterpart in Germany today. . . .

"The advice of our elders? Certainly, let us listen to it so long as it is advice, not dictation masking under a label. The college editor today knows as much as faculty members who stopped growing intellectually ten or fifteen years ago. . . .

"It is time for the undergraduate leaders of this country to rise up in revolt against this suppression of free college newspapers. If the student now admits his own ignorance, how much will he know when he graduates? If he is willing to compromise now, is there any likelihood that

he will reject intellectual cowardice, as expressed through this continual meeting half-way, later on in life?

An article on "A Plan for Youth in Politics" makes the following observation:

"In the past, many undergraduates have stayed away from student political movements for one or two reasons. In the first place, student political movements have always tended to be agitating, educational groups which, because of their tactics, have appeared too loud and distasteful to the majority. Secondly, few undergraduate movements have arisen in a cooperating spirit, and few have been of an un-revolutionary character. Again, if one wishes a third and climaxing argument, one need only understand that American students will never flock in great numbers to the banner of a man or an organization which does their thinking for them. Thus, because of the general dissatisfaction with student political movements, few undergraduates have ever seriously thought of a way to mix in politics while still in college. However, we are correct in believing that in most colleges there are rather large groups of young men and women who would desire to work in a cooperative, peaceful spirit with the men who are managing our public affairs today."

A plan presented by Secretary of Commerce Roper to the National Student Federation is summarized as including the following procedures: In each college should be organized a group for engaging in active politics. Students could offer their services in behalf of candidates for political office and campaign vigorously for him. At other times they should ask for the opportunity to discuss in a systematic way with political leaders various projects for social and political reform. By such means some immediate effect might be achieved in current political conditions, and a nation-wide practical school for the training of enlightened political leadership be promoted.

Science

The issue of February 23 describes the experiments being carried on at the Bureau of Standards in Washington to improve methods of preserving important records in libraries. Some of the results already obtained are summarized as follows:

"For the past four years, the various rather intangible problems confronting librarians in their attempt to save valuable publications from early decay have been studied systematically. Surveys of the conditions surrounding stored material in public libraries indicated that light, adverse temperature and humidity conditions, acidic pollution of the air, and poor paper were all taking their toll. Laboratory studies of the effect of light showed that it has a more intensive effect than was

commonly realized, that even high-grade book and writing papers may be rapidly weakened by its action, and that this effect may occur without visible evidence of it. Careful control of temperature, and particularly humidity, was found necessary to prevent dampness which promotes mold, or excessive dryness which makes book materials brittle. In both laboratory exposures of paper to air containing sulphur dioxide, and studies of its effect under normal library conditions, this product of fuel combustion was found to be a most potent source of deterioration. However, it was proved that this danger could be eliminated effectively and inexpensively by washing the air with an alkaline solution. Tests of old newspapers and book papers revealed the deteriorative effects of crude fibers, such as ground wood, which for a time was used more or less for all classes of publications. A partially completed study of the protection of records printed on impermanent paper indicated that a covering of Japanese tissue paper or transparent cellulose acetate sheeting might be suitable. Additional work, it is said, should be done on this problem, and on the equally interesting possibility of preventing or retarding decay of papers by the incorporation of protective materials in them. Of various materials proposed for the reproduction of records, permanent photostat paper appeared to be the most suitable."

The current economy program in government has suspended these experiments, but it is hoped that funds will be provided for their continuation.

With regard to the International Congress of Anthropological and Ethnological Sciences the following information is given:

"The first session of an International Congress of Anthropological and Ethnological Sciences will be held in London, under royal patronage, from July 30 to August 4. It is to include all those departments of research which contribute to the scientific study of man, and in their application to races, peoples, and modes of life.

"The congress was planned more than twenty years ago by a small international committee at the invitation of the Royal Anthropological Institute and the first session was to have been held in 1916. The congress as now established is to meet at intervals of four years midway between the sessions every four years of the International Congresses of Prehistoric and Protohistoric Sciences established in 1932. It is designed to take place in the years in which the Americanist Congress meets in Europe, as it does this year at Seville. . . ."

Journal of the Association of American Medical Colleges

The January issue contains articles by Dean Rappleye, of Columbia; Secretary Cutter, of the Council on Medical Education in Hospitals;

Dean Bardeen, of Wisconsin; and Dean Bass, of Tulane, on the important question, "Are There Too Many Physicians?", also an editorial from which the following paragraph is quoted:

"Lack of definite data on how many members of each entering class graduate makes it impossible to make any positive statement or to present figures. However, independent unpublished studies have shown that 25 per cent is a fair average. Published studies have shown that nearly 15 per cent drop out at the end of the first year for one reason or another, mostly on account of poor scholarship. About six or seven per cent drop out at the end of the second year; about two per cent at the end of the third year, and probably not more than one per cent at the end of the fourth year. Other studies have shown that another 25 per cent drop out of the practice of medicine within ten years after graduation, either by death (a small number) or for other reasons."

Journal of Engineering Education

Accrediting of Schools

The February number contains a paper from the Engineers' Council for Professional Development with a brief account of the work of a Committee on Engineering Schools which is studying the problem of accrediting them, and which has made a report reading in part as follows:

"'The committee has reached the conclusion that, although there is room for a considerable difference of opinion as to the theoretical desirability of accrediting, the facts are that accrediting of engineering schools is being done by several agencies and there is little, if any, coordination in these efforts. No thoroughly representative and authoritative body accredits engineering schools at the present time. The Engineers' Council for Professional Development is just such an organization and one of its proper functions should be to compose a list of institutions which, after careful investigation, are found to be adequately prepared to offer sound and comprehensive instruction in the various major curricula.

"'Some method of accrediting engineering schools is required by force of laws governing the licensing of engineers in a majority of the states. In order that accrediting may be done uniformly, consistent with the high ideals of the engineering profession and in such a manner as to be a stimulus to the best development of engineering education, rather than a deterrent to future progress through codification of certain present standards, the National Engineering Societies should be invited to prepare and administer a plan of accrediting engineering schools. The following principles are suggested as the basis of such a plan:

"'Absolute minimum standards of the education process have been

avoided as likely to fetter future progress. Information on important aspects of organization, administration, curricula, and standards of each school is to be assembled, the institution personally investigated by a committee, and final action taken by the Engineers' Council for Professional Development after careful consideration of all aspects of the situation.

" 'Because of the variety of types of engineering training and the specialized character of many schools, accrediting is done on the basis of six major curricula rather than for the school as a whole. Allowance is made, however, for consideration of other curricula than these six.

" 'It is hoped that the accredited list to be prepared on these bases may be uniformly adopted, thus relieving societies and states from the necessity of duplicating individual action and relieving schools from the necessity of submitting to numerous examinations and questionnaires.

" 'Inasmuch as there are movements under way at the present time in the direction of liberalizing the classroom requirements in certain engineering curricula, and for other reasons, it is not desirable to make any specification of the number of hours and credits which will be required in order that a curriculum may be approved. There should be no published prescriptions regarding curricula. A general statement of good practice with respect to hours, credits, and so on should be distributed to the persons making visits for their confidential use.'

"In line with these thoughts the committee recommended definitely that Council undertake a program of accrediting the several curricula of the various schools of engineering which are deserving of such recognition, and it presented a well developed and comprehensive plan for such work.

"Let me emphasize the fact that whether we individually believe in it or not or whether we individually like it or not, accrediting of engineering schools is here, not through voluntary action of the profession, but through enactment of laws by state legislatures. It is surely far better and far saner to have such accrediting done on a national basis under the auspices of a body such as the Council which represents all parties in interest than to have as many different lists of accredited schools as there will be shortly if we allow Nature to take its course."

President Elliott of Purdue contributes a brief suggestive discussion, "What Can We Do to Aid the Student Affected by the Depression?"

Occupations, the Vocational Guidance Magazine

Educators and others who are concerned about the occupational future of students and unemployed may be interested in a symposium of six

articles on "Occupational Distribution and Trends" in the February, 1934, number of *Occupations, the Vocational Guidance Magazine.* Special editors for this issue are Walter V. Bingham, Director of the Personnel Research Federation, and Harold F. Clark, Professor of Education in Teachers College, Columbia University. Single copies of the magazine may be purchased at fifty cents, check or stamps with order, postpaid from the National Occupational Conference, 522 Fifth Avenue, New York.

LOCAL AND CHAPTER NOTES

City College, Fund for Needy Students

The City College, New York, announces that members of the faculty have contributed over $10,000 to a fund providing for the employment of needy students during 1933, and that more than 500 students have been assisted.

University of Kentucky, School Code

A school code has been submitted to the 1934 session of the general assembly by the superintendent of public instruction. It is designed to prevent the collapse of the school system of the state, and to bring about equality of educational opportunity.

Article 11, relating to higher education, provides for the establishment of a council on public higher education, including the president or chief officer of the various institutions of higher learning for white persons, a member of the board of regents of each of the state teachers' colleges, three members of the board of trustees of the state university, and certain others to the total number of 16. This council is to have power to coordinate the work of various institutions of higher learning, and to consider the budgetary requirements of each of the institutions, making recommendations to the state budget committee.

Later sections of the code deal specifically with the state university, the state teachers' colleges, and higher education for Negroes.

New York State Emergency Colleges

Twelve emergency colleges have been established during the past year in New York. These institutions have been set up to offer educational facilities to high school graduates who have been financially unable to continue their education and who, at the same time, have been unable to find employment. As the winter of 1932–33 passed it became evident to many thoughtful educators and relief administrators of this state that a large number of recently graduated high school students were unable to go on to college for financial reasons. At the same time it was discovered that there were available many highly trained and experienced college instructors who were temporarily without teaching positions. It therefore was decided to bring these two groups together, and steps were taken to establish a series of emergency collegiate centers. Part of the relief funds allocated to education were set aside to pay the salaries of the instructors who were to teach at the centers and their salaries were to be uniform—$15 per instructor a week.

The response to this plan was immediate and enthusiastic. By the

end of March centers were established at Albany, Buffalo, Garden City, Rochester, Syracuse, and White Plains. Registration at the different centers varied. At White Plains 100 students were enrolled, while at Buffalo more than 500 young people applied for admission. At the other centers the registration averaged 200.

In order to make certain that a high standard of work would be maintained, the State Department of Education asked for the cooperation of the heads of state or city colleges already established in the localities where it was decided to open the centers. The State Colleges for Teachers at Albany and Buffalo sponsored the centers located in those cities, while the centers at White Plains and Garden City were opened by the president of the College of the City of New York.

The presidents of these sponsoring institutions selected the faculties for the centers, outlined the curricula to be pursued, set up the entrance requirements for the students who applied for admission, and in many cases turned over the facilities of their institutions to the centers. After the machinery had been set in motion, the direction of the center was turned over to a dean or registrar.

The courses offered at the centers were the usual freshman survey courses corresponding to the courses offered to the freshmen of the sponsoring institutions. This was to make easier the transfer of credits when the student finished his work at the center and was ready to enter a standard college. But a surprisingly large number of students registered who had already had one year of college work, and it was decided to offer courses in English and American literature, government, sociology, public speaking, and economics to meet the special needs of these young people.

In an effort to make the student life at the centers similar to the student life at the sponsoring colleges, the centers developed interesting and varied extra-curricular activities. Two centers organized active dramatic and musical groups; other centers issued weekly newspapers, mimeographed for economy's sake, but as full of news and jokes as many regular college papers. Several of the centers organized independently or in cooperation with the sponsoring colleges athletic teams, tennis, base ball, etc.

The work of these six original centers was so successful that the state decided early last fall to continue them. This decision was amply justified by the advance registration. In almost all cases the registration figures showed a decided increase over last spring. At White Plains 30 more students applied for admission, while at Garden City the number of registrants jumped from 256 to 457.

Due to this increased registration and due also to the difficulties of providing inexpensive means of transportation in the upstate sections

it was decided to open additional centers. Branches of the Emergency Junior College at Albany were opened at Troy and Schenectady, while centers were also opened at Auburn, Cortland, Little Falls, and Newark.

In most cases the activities of the old centers were enlarged. The work was made to conform to the standard requirements of the first year of a junior college. A 75 per cent regents' average was set as the minimum entrance requirement. New courses were added. The faculties were increased. At Buffalo eight instructors volunteered their services.

Pennsylvania State College, Faculty Health

The Pennsylvania State College Chapter of the Association has been active during the past year in furthering the health interests of the faculty at that institution. In December, 1932, Professor Leonard A. Doggett, the recently retired President of the local chapter, approached the Director of Health Service at the College, Dr. J. P. Ritenour, with the request for a definite statement as to the availability of hospital service to faculty members at the College Infirmary in emergency cases.

Dr. Ritenour brought the chapter's request to the attention of the President; and the chapter was gratified to learn at the January, 1933, meeting that the Trustees of the College had adopted a ruling to the effect that the medical facilities of the College might "be used temporarily in strictly emergency cases by members of the faculty and their immediate families, if in the opinion of the College physician or his representatives the emergency warrants such use and space is available. For this service hospitalization rates comparable to similar costs in this district should be charged."

At the same January meeting, Professor Doggett appointed two committees, a Committee on Faculty Health and a Committee on Faculty Sports and Recreation, to suggest plans whereby in the one instance the health of faculty members might be guarded by periodical physical examinations, and whereby in the other instance the faculty might be given the opportunity through the facilities of the Department of Physical Education to engage in recreational sports. Both committees are still working on their assignments.

University of Toronto, Excerpt from the Report of the President

"The cost of higher education has markedly increased in recent years. This enhanced cost bears most heavily on the students who reside at a distance from university cities, and who must pay not only the usual fees for tuition, but also the charges for board and lodging. There is

a real danger that all universities may serve chiefly the regions immediately adjacent. Yet some of the best students come from homes in the country, the village, or the small town. To these must be given an educational opportunity in as full measure as it is offered to the city resident. How can this equalization of opportunity be brought about? As far as we can see, mainly by the establishment of scholarships, bursaries, or loan funds which by preference help the young men and women from the districts outside the city. I am glad to say that some of the scholarships recently established and the bursaries offered by University College do give a preference to the outside student. I hope that friends of the University and especially former graduates or groups of alumni will provide an increasing number of scholarships or loan funds. The money invested in helping students of ability and determination brings a rich return both to the giver, the recipient, and the country at large.

"There is a possibility that the real aim and spirit of a University may be suppressed or forgotten. On this continent the practice favors the inclusion in the University of many faculties of applied science in addition to the historic faculties of arts, medicine, law, and theology. In the Universities of the Motherland emphasis is placed on the centrality and supremacy of the liberal arts. The Faculty of Arts remains the cultural heart of the University. Against that background the professional and practical studies are carried on. In these studies the university spirit is seen to be operative, because not merely practice and technique are taught, but the general principles that are underlying. Wherever a real university is found and in whatever century it is examined, it will be apparent that its aim always is to teach the young to think and to understand the meaning of things in their universal relationships. This ultimate aim must be kept in view in every faculty and department of a university."

A Plan for Encouraging Chapter Activity

In line with the Report of the Committee on Chapters published in the February *Bulletin*, recent correspondence of the Washington office with the chairman, Professor G. H. Ryden, University of Delaware, and his associates has led to the initiation of the following plan: Each of the eleven members of the Committee has been assigned a geographical division corresponding to his own location and has been furnished with a complete list of accredited institutions within the region, with a notation of the number of active members in 1933 and in 1934 and of the location of chapters.

The Committee member is requested to enter into correspondence with chapter officers with a view to encouraging active participation in

the work of the Association, and where desirable arranging for visits by officers or members of the Council, and for the holding of regional conferences. It is not implied that any pressure will be brought to bear on reluctant chapters, but that there will be exchange of ideas between the chapter officers and a representative of the Association not so remote as the Washington office. Experience with the plan will afford a basis for further developments in a direction which should prove of considerable importance.

Further reference to the matter will be made in the April chapter letter. The geographical distribution is not published at this time, being still in a somewhat plastic state. Each chapter will be informed in the chapter letter of the member of the Committee to which it has been assigned.

MEMBERSHIP

ACTIVE MEMBERS ELECTED

The Committee on Admissions announces the election of sixty-six active and twenty-three junior members as follows:

University of Alabama, William P. Ott; **Albright College,** Alexander G. F. Godevon Aesch; **Armour Institute of Technology,** Clair Olson; **Baylor University,** Frank E. Burkhalter, Neil S. Foster, Charles S. Gardiner, Robert Hopkins, Everett M. McCracken, Anton Navratil; **Berea College,** Katherine H. McKinstry; **Brothers College,** Norman M. Guy; **Carnegie Institute of Technology,** Alexander Erlick, Fredrik V. Nyquist; **Colgate University,** Charles A. Choquette, Norman E. Himes, C. Harold King, Albert L. Meyers, Norman J. Padelford, John S. Tremper, Clarence W. Young; **Columbia University,** Theodore Baumeister, Jr., Carl Shoup, Harold C. Urey; **Dartmouth College,** Russell R. Larmon; **De Pauw University,** Guenther H. Grueninger; **Dickinson College,** Horace E. Rogers; **University of Idaho,** Giovanni Costigan; **Kenyon College,** Paul M. Titus; **Lehigh University,** Theodore T. Lafferty; **University of Maryland,** Arthur C. Parsons; **Michigan State College of Agriculture and Applied Science,** Mabelle S. Ehlers, Edward Gee, Edward C. Prophet, Gladys Winegar; **University of Michigan,** Ralph W. Hammett; **University of Nebraska,** R. W. Frantz; **University of New Mexico,** Thomas M. Pearce; **New York University,** Edwin B. Burgum; **Northwestern University,** Paul Haensel; **Ohio Wesleyan University,** William E. Riecken; **University of Oregon,** Roy G. Bryson; **Pennsylvania State College,** Beatrice L. Hagen; **University of Pennsylvania,** John G. Brainerd, Hugh Carter; **Seton Hall College,** Fred J. Delmore; **Seton Hill College,** Emmy Ohl; **Simmons College,** Margia B. Abbott, Alice F. Blood, Agnes E. Conwell, Isabella K. Coulter; **Stanford University,** Helen M. Bunting; **Syracuse University,** Andre Polah, Warren Shepard; **Agricultural and Mechanical College of Texas,** Ira G. Adams, Joseph A. Orr; **Texas State Teachers College (Southwest),** David F. Votaw; **Vassar College,** James F. Baldwin; **University of Vermont,** Herman B. Kiphuth, Edwin H. Reeder; **Washburn College,** Frank S. Kenyon; **Wells College,** Edgar M. Bowman; **Western Reserve University,** Winfield H. Rogers; **Williams College,** W. Edwards Beach, David Brown, Stuart Chapin, Harold L. Dorwart.

TRANSFERS FROM JUNIOR TO ACTIVE MEMBERSHIP

Dartmouth College, Joseph G. Pollard; **Goucher College,** Clara J. Quincer; **Mount Holyoke College,** Margaret E. Taylor; **St. Mary of the Woods College,** Camilla Hayden; **Whitman College,** Marvin W. Cragun; **University of Wisconsin,** H. S. Bluhm.

JUNIOR MEMBERS ELECTED

Columbia University, Jessica P. Leland; **Harvard University,** Esther E. Nelson; **University of Montana,** Alvin Y. Wells; **University of North Carolina,** Newton D. Holbrook, 3rd; **Northwestern University,** John C. Eberhart, C. Iver Hovland; **University of Oregon,** Wallace J. Campbell; **College of St. Teresa,** Willis D. Nutting; **University of Virginia,** Ladley Husted, Gilford G. Quarles; **Washburn College,** John E. Canaday, Joseph I. Gartside; **Williams College,** Lawrence W. Beals,

Patterson H. French, Harold B. Hitchcock, Andrew S. Keck, Hallett D. Smith; **University of Wisconsin,** Caroline A. Lander; **Yale University,** Donald D. Wright; **Not in University Connection,** Herbert B. Butcher (Ph.D., Pennsylvania), Trenton, N. J.; Marguerite H. Clarke (M.A., Columbia), New York, N. Y.; Allan Latham (Ph.D., Harvard), Montreal, Can.; Theodore Nicol (Ph.D., Harvard), Worcester, Mass.

NOMINATIONS FOR MEMBERSHIP

The following one hundred and eight nominations for active membership and forty-two nominations for junior membership are printed as provided under Article IV of the Constitution. Objection to any nominee may be addressed to the General Secretary, 744 Jackson Place, Washington, D. C., or to the Chairman of the Committee on Admissions[1] and will be considered by the Committee if received before May 25, 1934.

The Committee on Admissions consists of R. E. Dengler, Pennsylvania State, Chairman; F. K. Beutel, Tulane; H. L. Crosby, Pennsylvania; A. C. Lane, Tufts; A. O. Lovejoy, Johns Hopkins; W. T. Magruder, Ohio State; Julian Park, Buffalo.

Paul R. Anderson (Philosophy), MacMurray
Ruth Anderson (Biology), California (Los Angeles)
Louis T. Bates (English), Georgia School of Technology
F. Joe Bedenk (Physical Education), Pennsylvania State
Hal C. Brown (English), Georgia School of Technology
T. Brown-Olin (Geography, Geology), Colgate
James E. Bullock (Physical Education), Williams
Charles T. Bumer (Mathematics), Kenyon
Lloyd W. Chapin (English), Georgia School of Technology
Edith M. Coulter (Library), California (Berkeley)
John B. Crenshaw (Modern Languages), Georgia School of Technology
Grace B. Daviess (Physical Education), Cincinnati
Charles A. Doan (Medicine), Ohio State
Roland Doane (Romance Languages), Vermont
Robert M. Duncan (History, Politics), Colgate
Huntley Dupre (History), Ohio State
Charles H. Dwight (Physics), Cincinnati
William L. Eagleton (Law), Chicago
Merle H. Elliott (Psychology), Harvard
William J. Everts (Romance Languages), Colgate
Edwin H. Folk, Jr. (English), Georgia School of Technology
Brownell Frasier (Architecture), Oregon
Sidney J. French (Chemistry), Colgate
Herman K. Fulmer (Mathematics), Georgia School of Technology
Raymond M. Gallagher (Political Science), De Paul
Philip L. Gamble (Economics), Wesleyan (Connecticut)
Jasper V. Garland (Public Speaking), Colgate
Laurence E. Gemeinhardt (German), Wesleyan (Connecticut)
Harold J. Grimm (History), Capital
Katharine F. Hersey (Physical Education), Ohio State
Alice L. Hopkins (Library Science), Simmons
Nellie M. Hord (Household Economics), Simmons
George F. Howe (History), Cincinnati
Leon B. Howe (Art), Syracuse

[1] Nominations should in all cases be presented through the Washington Office, 744 Jackson Place, Washington, D. C.

Malcolm C. Hylan (Physics), Colorado
William A. Irwin (Old Testament), Chicago
Fred S. Keller (Psychology), Colgate
Paul Knaplund (History), Wisconsin
Paul V. Kreider (English), Cincinnati
Victor K. La Mer (Chemistry), Columbia
Shaw Livermore (Economics), Buffalo
Dwight C. Long (History), Michigan
William H. McPherson (Economics), Western Reserve
Salvatore C. Mangiafico (Spanish), Sweet Briar
Hazel Manning (Home Economics), Wisconsin
Archimede Marni (Romance Languages), Cincinnati
Ernest O. Melby (Education), Northwestern
Paul E. Millington (Chemistry), Wisconsin
Allan C. G. Mitchell (Physics), New York
Paul A. Moody (Zoology), Vermont
Andrew F. Moursund, Jr. (Mathematics), Oregon
Abraham P. Nasatir (History), California State Teachers
Young A. Neal (French, Spanish), City of Toledo
Joshua H. Neumann (English), Brooklyn
Mary E. Osborn (English), Hood
Leishman Peacock (English), Colgate
William G. Perry (English), Georgia School of Technology
C. Wesley Phy (English), Lehigh
Emilio R. Pineda-Galvan (Romance Languages), City (New York)
Isidore Pomerance (Philosophy), Brooklyn
Martha M. Reynolds (Child Study), Vassar
Lewis Richards (Music), Michigan State
Horace B. Ritchie (Education), Georgia
David M. Robb (Fine Arts), Colgate
Rodney P. Robinson (Classics), Cincinnati
Matthias F. Schmitz (German), Smith
Alexander Schuster (Music), Michigan State
Raymond J. Seeger (Physics), George Washington
Sam Selby (Mathematics), Akron
Herbert R. Sinnard (Architecture), Oregon
Florence Stratemeyer (Education), Columbia
Harold H. Titus (Philosophy), Denison
Willis L. Tressler (Biology), Buffalo
W. Harry Vaughan (Ceramics), Georgia School of Technology
Harold M. Vinacke (Political Science), Cincinnati
David A. Weaver (Psychology), City (New York)
Palmer C. Weaver (Education), Pennsylvania State
Peter D. Webster (English), Norwich
Harold Wentworth (English), Cornell
H. K. Wilson (Agronomy), Minnesota
John A. Wilson (Egyptology), Chicago
Everly J. Workman (Physics), New Mexico

NOMINATIONS FOR JUNIOR MEMBERSHIP

Blanch L. Baxter (Chemistry), Columbia
Peter A. Bertocci (Philosophy), Boston
Howard G. Brunsman (Statistical Research), Ohio State
Elizabeth J. Cole (Mathematics), Chicago
Everett Cox (Physics), Colgate
MacDonald Fulton (Biology), Brown
Russell V. Giffin (Italian), California (Berkeley)
Richard M. Haff (Zoology), Cornell
Margaret Hess (Biology), Virginia
James E. Jackson (Political Science), Wisconsin
Ada B. Johnson (Home Economics), Columbia
Isidore Kayfetz (Education), Brooklyn
Carl H. Laub (History), Wisconsin
Charles J. McDermott, Jr. (English), Brooklyn
Virginia P. Matthias (English), Mount Holyoke
Robert A. Pratt (English), Rochester
Milton F. Schadegg (Philosophy of Education), Harvard
Richard Sears (Psychology), Michigan
George C. Seeck (Psychology), Michigan
John H. Styka (Philosophy), Seton Hill
Robert W. Talley (Architecture), Rice
Arnold Tilden (History), Southern California
George B. Toll (Economics), California (Berkeley)
Frederick W. Toppan (Geology), Union
Howard D. Williams (History), Colgate
Charles R. Wilson (History), Cincinnati

SUPPLEMENTARY LIST OF NOMINATIONS FOR ACTIVE MEMBERSHIP

Dorothy Allen (Biology), Keuka
G. C. Anderson (Political Science), Oklahoma Agricultural and Mechanical
J. Roy Blough (Economics), Cincinnati
John L. Childs (Philosophy of Education), Columbia
Katherine B. Conover (Art), Wayne
Ula M. Dow (Household Economics), Simmons
David Driscoll (Speech), Brooklyn
Robert W. Ellis (Geology), New Mexico
William N. Felt (French), Denison
Charles R. Flack (Library), Southwestern Louisiana
Denis L. Fox (Physiology), California (Berkeley)
Kate Gordon (Psychology), California (Los Angeles)
Henry-Russell Hitchcock, Jr. (Art), Wesleyan (Connecticut)
David T. Jones (Zoology), Utah
B. O. Koopman (Mathematics), Columbia
Clair Leonard (French), Vermont
Gilbert F. Loebs (Physical Education), Pennsylvania State
Ruth S. Lynch (Zoology), Johns Hopkins
Meredith F. Parker (Chemistry), Rutgers

Tracy M. Sonneborn (Zoology), Johns Hopkins
Edwin O. Stene (Political Science), Cincinnati
John E. Tracy (Law), Michigan
E. G. Trimble (Political Science), Kentucky
A. Geraldine Whiting (Botany), Smith
Marjorie Williams (Astronomy), Smith
Parke H. Woodard (Physiology), Kansas

SUPPLEMENTARY LIST OF NOMINATIONS FOR JUNIOR MEMBERSHIP

Siegmund A. E. Betz (English), Cincinnati
E. L. Beutner (Geology), Michigan
Joseph L. Clark (Education, Psychology), North Carolina
Mary S. Clay (Fine Arts), Columbia
Harold Jantz (German), Antioch
John E. Jenkins (Social Science), Harvard
William R. Lueck (Arithmetic), Iowa
Albert C. Metts (Education), Southern California
Charles H. Z. Meyer (Sociology), Northwestern
Edward F. Meylan (French), California (Berkeley)
Marvin A. Miller (Library), New Hampshire
Lorenz Misbach (Psychology), Johns Hopkins
Lester V. Plum (Economics), Princeton
Nolan E. Rice (Zoology), Duke
Henry H. Walsh (History), Columbia
Clarence Zener (Theoretical Physics), Harvard

Appointment Service Announcements

The Appointment Service is open only to members but formal registration is necessary. Those interested in keyed vacancies may have duplicates of their registration blanks transmitted to appointing officers on request.

Members registered with the Appointment Service may have brief announcements inserted in the Teachers Available Section at a charge of $1.00 per line for the first insertion and 50 per cent of that amount for repetitions. Copy should reach the Washington Office not later than the end of the month preceding publication.

Administrative officers who are interested in announcements under Teachers Available may, upon inquiry, receive copies of registration papers of candidates. Appointing officers are invited to report vacancies at their institutions.

Vacancies Reported

Art: Instructor, man, central state university. To teach design; also able to instruct in interior decoration, textile, and commercial design. Teaching experience and practical knowledge of subject necessary. To fill leave of absence 1934–35, possibility of permanent appointment. Salary, $1800, less 15%. V 698

Ceramics: Research fellow, man, eastern university. Ph.D. preferred, training and experience in silicate chemistry, mineralogy, ceramics. Research type with initiative, good personality and appearance. June 1, or before. Salary, $2100–$2400. V 704

Civil Engineering: Assistant or associate professor, central urban university. Five or more years' teaching, some professional or industrial experience. To take charge of courses in public and municipal works (water supply and sewerage systems, rivers, harbors, canals, and irrigation projects). V 697

European and English History: Instructor, man, south central state university. Ph.D.; experience not necessary. Salary, $1600–$1700. V 690

French: Instructor, man, eastern urban university. Ph.D. or within one year of degree, college experience, fluent use of language. Salary, $2000–$2500. V 691

Fuels and Metallurgy: Research fellow, man, eastern university, department of ceramics. Ph.D. preferred, experience not necessary. Special training in fuels and metallurgy preferable. Research type with good personality necessary. July 1, 1934. Salary, $2000–$2500. V 699

Home Economics: Assistant professor, woman, north central state college. To teach clothing construction and design, and merchandising. M.A. at least, commercial training or experience in merchandising, college teaching. N. Y. U. or Prince School training preferable. Salary, about $2400. V 692

Library Science: Professor, man, leading southern university for negroes. Ph.D. or equivalent work; training in library science; experience, broad cultural background, ability to work with people. Salary, $3000–$4000. V 669

Mathematics: Professor, man, southern college. Ph.D. necessary, Baptist preferred. Salary, around $1800. V 708

Modern Languages: Head of department, southern college for women. To teach French and Spanish. Ph.D., member of an Evangelical church. Salary, $3000, 15% cut. V 705

Psychology: Professor, man, head of department, eastern university. Ph.D., considerable training and experience necessary. Salary, $3000–$3500. V 709

Spanish, elementary French: Instructor, eastern college. M.A. necessary, foreign study desirable. One year appointment (leave of absence). $1500–$1600. V 693

Teachers Available

Administration, Physics, History of Science: Man, Ph.D. Wide experience. A 854

Aeronautical, Mechanical Engineering: M.S. Five years' teaching and executive experience. A 855

American History (Political, Economic, Constitutional): A.B. Brown, M.A. Harvard, Ph.D. Ohio State; research; business statistics. A 856

Argumentation, Debate, Oratory: Man, 46, M.A., 22 years' college teaching experience (13 years head of department of public speaking). Author successful textbooks, Debate and Oratory. A 857

Biochemistry: Woman, Ph.D. Columbia. Seven years' teaching, three years' research. Publications. Available September, 1934. A 858

Biology: Man, Sc.D. Johns Hopkins. Five years' full time research. Publications. Pre-medical subjects, especially parasitology. A 859

Botany: Man, 42, married, Ph.D. Twelve years' experience in university teaching and research. Honorary societies, publications, excellent references. A 860

Botany: Man, 32, Ph.D. in June. Four years' university teaching. A 861

Botany: Woman, M.S., near Ph.D. Experienced teacher. A 862

Business Administration and Economics: Man, former appointee in London School of Economics, experienced in college teaching, psychology testing to adjust personality, and practical business. Will come for interview after details straightened. A 863

Classics: Man, 40, married, M.A., candidate for Ph.D. Four years' experience in large university. A 864

Classics: Young woman, Ph.D. Johns Hopkins, seeks position as assistant, teaching or research. A 865

Cultural and Physical Anthropology: Man, Ph.D. Yale, postgraduate study University of Berlin, Germany. Long experience college teaching, travel, lecturer, desires change. Available now. A 866

Economics, Business Administration: Man, 26, candidate Ph.D., August, 1934. Four years in research bureau, teaching experience. A 867

Economics, History, Sociology: Man, Ph.D. Fourteen years' experience. A 868

English: Man, 34, M.A. Harvard. Six years' university and college teaching experience. English literature, technical exposition. Available September. A 869

English: Man, 30, M.A., near Ph.D. Five years instructor major eastern university. Language publications; editor. Autumn. A 870

English: Man, married, Ph.D. Columbia. Experienced, training in college administration. Travel abroad. A 871

English: Man, Ph.D. Columbia. Wide teaching experience, several years head of department, study and travel abroad. Available September. A 872

English: Married, 38, recent Columbia Ph.D. professor in college desires university appointment. Publication. A 873

English, History of Art: Graduate of Harvard. More than 15 years' experience, in the Far East, Pacific Coast States, and New England. Year in Europe with Carnegie Corporation scholarship. Some museum work; magazine articles. A 874

English: Man, 30, Ph.D. Harvard. Three years' university teaching experience. Articles. Available at once. A 875

European History and Modern Languages (French, German, Italian): Ph.D. Marburg (Germany). Widely traveled, long residence in France, Germany, and Italy. Fifteen years' teaching experience; at present, associate professor, middle Atlantic college. Publications, broad cultural interests, excellent references. A 876

Far Eastern Civilizations: Man, Ph.D. Yale. Wide travel, long residence in Orient, acquaintance with vernacular, experienced teacher and lecturer, available now or September. A 877

French, German: Man, Ph.D. (American and French). Long training, wide teaching experience. Department head. Research, publications. A 878

French, Spanish: American, single, 30, Ph.D. Harvard. Experience travel, research. A 879

French, Spanish: Young woman, near Ph.D. Foreign travel. Seven years' college teaching. Available June, 1934. A 880

Geography: Man, 27, Ph.D. Chicago. Experience. Available now. A 881

Geology: Ph.D. Princeton University. Teaching and research experience in stratigraphy, structure, and geomorphology. A 882

German: Ph.D. Marburg. At present assistant professor at eastern university. Equally qualified to teach French, Latin, and Greek. A 883

History: Man, 27, Ph.D. California. Experience. Available 1934. A 884

History: Woman, Ph.D. Chicago. Graduate study also at Radcliffe and London. Eight years' experience in college teaching. A 885

History of Art and Comparative Literature: Young man, 27, single, M.A. Harvard, two years' additional course training toward Ph.D. Formerly

assistant professor in eastern college. Experienced in organizing new department and arranging exhibitions. Museum training. Publications. Available at once. A 886

Italian: Graduate Italian university; French; Spanish. A 887

Latin and Greek: Woman, Ph.D. California. University experience, foreign travel. Publications. Available September, 1934. A 888

Mathematics: Man, 30. Applied viewpoint, Ph.D., M. I. T. Ten years' college and university teaching experience. Available September. A 889

Mathematics: Man, married, M.A., with additional work in education and personnel. Eight years' mathematics teaching in college. Experience in personnel and supervision. Desires position in mathematics. A 890

Mathematics: Man, married, M.S. Chicago. Four years' graduate work. Twelve years' college teaching. A 891

Mathematics: Ph.D., 10 years' college and university experience. Available June or September. A 892

Mathematics and Astronomy: Woman, Ph.D. Michigan, 12 years' college teaching both subjects. Publications, research. Available June. A 893

Mathematics and Statistics: Woman, 24, M.A. University of Chicago. Teacher in Progressive School one year. Travel. Research. A 894

Mathematics or Teaching of Mathematics: Man, 36, married, Ph.D. Columbia. Ten years' college experience. Now assistant professor in mid-western college. A 895

Mechanical Engineering: Man, 30, M.E. Yale. Thermodynamics, internal combustion engines, and steam power. Seven years' teaching with experience as consultant on boiler plant and gasoline engine design. Available September. A 896

Music: Man, A.B., Mus. B., piano, organ, theoretical subjects. Eleven years' college teaching. American and foreign study. A 897

Philosophy: Ph.D. Thirteen years' college and university experience. Available September. A 898

Philosophy: Woman, Ph.D. Bryn Mawr. Experience. Available 1934. A 899

Philosophy, English, Assistant Deanship: Woman, Ph.D. Experience. Available 1934. A 900

Philosophy, German, Psychology: Ph.D., college experience. A 901

Philosophy, History of Religions: Man, 37, Ph.D. Secondary and college teaching. Also qualified to teach psychology, sociology, education. Prefers west, southwest, or south. Available summer or fall, 1934. A 902

Philosophy, Religion, Bible: Ph.D. Columbia. Six years' college teaching. A 903

Physics: Man, Ph.D. Nebraska; 12 years' physics teaching in college. Because of child's health, wishes location in a warm and preferably dry climate. A 904

Physics: Ph.D. Cornell. Experienced. Past five years, head of department. A 905

Physics, Mathematics, Electric Circuits: Ph.D. Study abroad. Publications. Teaching and research. A 906

Psychology: Man, 27, Ph.D. Columbia. Four years' university teaching. Publications. Sigma Xi. A 907

Psychology: Ph.D. Princeton. Five years in present position, publications, available September, 1934. A 908

Sociology: Man, Yale Ph.D. Publications, accomplished linguist, traveled, lecturer, years in large New England college, desires transfer either end of 1934. A 909

Spanish: Man, married, Colombian native. A.B., Ph.B. Fifteen years' university teaching. French and Italian if desired. A 910

Statistics: Teaching experience; trained in research. A 911

Theoretical Physics: Man, married, Ph.D. Harvard. Sheldon fellowship, Harvard. National Research Fellowship, two years. Research Associate, University of Bristol, 1932—present. Available, September. A 912

Zoology, Biology: Man, Ph.D. Cornell, 10 years in business, over 5 years' college teaching. Premedical subjects. A 913